

CORRECTED VERSION

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
25 April 2002 (25.04.2002)

PCT

(10) International Publication Number
WO 02/32451 A1(51) International Patent Classification⁷: A61K 39/00,
39/39, 38/00

(21) International Application Number: PCT/EP01/12041

(22) International Filing Date: 18 October 2001 (18.10.2001)

(25) Filing Language: English

(26) Publication Language: English

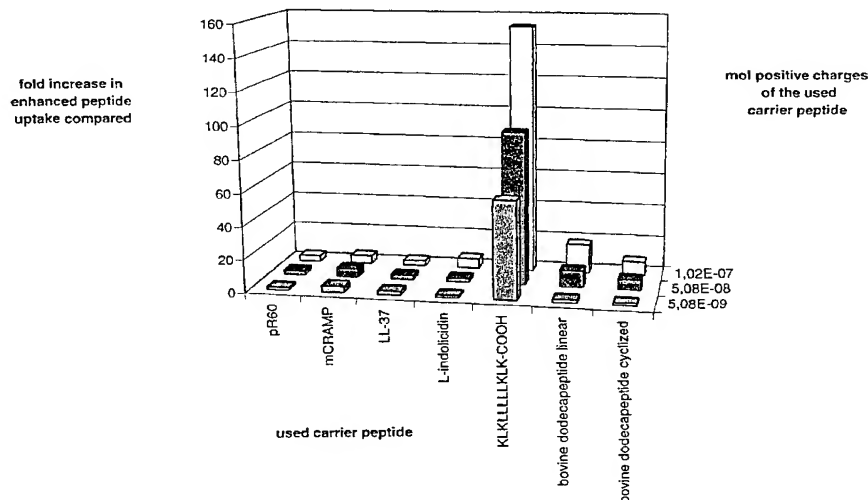
(30) Priority Data:
A 1789/00 18 October 2000 (18.10.2000) AT(71) Applicant (for all designated States except US): CISTEM
BIOTECHNOLOGIES GMBH [AT/AT]; Rennweg 95B,
A-1030 Vienna (AT).

(72) Inventors; and

(75) Inventors/Applicants (for US only): FRITZ, Jörg
[AT/AT]; Neubaugasse 55/1/2B, A-1070 Vienna (AT).MATTNER, Frank [DE/AT]; Krottenbachstrasse
267/D12, A-1190 Vienna (AT). ZAUNER, Wolfgang
[AT/AT]; Parkgasse 13/22, A-1030 Vienna (AT). NAGY,
Eszter [HU/AT]; Taborstrasse 9, A-1020 Vienna (AT).
BUSCHLE, Michael [DE/AT]; Goethestrasse 2/2/9,
A-2380 Perchtoldsdorf (AT).(74) Agents: SONN, Helmut et al.; Reimergasse 14, A-1010
Wien (AT).(81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI,
SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU,
ZA, ZW.(84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian
patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European

[Continued on next page]

(54) Title: VACCINE COMPOSITION COMPRISING AN ANTIGEN AND A PEPTIDE HAVING ADJUVANT PROPERTIES



(57) Abstract: The invention relates to a vaccine which comprises at least one antigen and a peptide comprising a sequence R_1 -XZ_NXZ_N-R₂, whereby N is a whole number between 3 and 7, preferably 5, -X is a positively charged natural and/or non-natural amino acid residue, Z is an amino acid residue selected from the group consisting of L, V, I, F and/or W, and R₁ and R₂ are selected independently from the other from the group consisting of -H, -NH₂, -COCH₃, -COH, a peptide with up to 20 amino acid residues or a peptide reactive group or a peptide linker with or without a peptide; X-R₂ may also be an amide, ester or thioester of the C-terminal amino acid residue, as well as the use of said peptide for the preparation of an adjuvant for enhancing the immune response to at least one antigen.

WO 02/32451 A1



patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

Declarations under Rule 4.17:

- of inventorship (Rule 4.17(iv)) for US only
- of inventorship (Rule 4.17(iv)) for US only

Published:

- with international search report

(48) Date of publication of this corrected version:

23 May 2002

(15) Information about Correction:

see PCT Gazette No. 21/2002 of 23 May 2002, Section II

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.